

# Austin & Rogers, P.A.

ATTORNEYS AND COUNSELORS AT LAW

C.C. HARNESS, III  
(1949-2010)

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**OF COUNSEL:**  
WILLIAM FREDERICK AUSTIN  
JEFFERSON D. GRIFFITH, III\*

\* ALSO ADMITTED IN N.C.

June 8, 2016

**VIA, ELECTRONIC FILING**

The Honorable Jocelyn Boyd  
Chief Clerk and Administrator  
The Public Service Commission of South Carolina  
101 Executive Center Drive  
Columbia, South Carolina 29210

Re: • Lily Solar LLC vs. South Carolina Electric & Gas Company  
• 2016-89-E

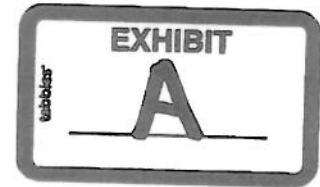
Dear Ms. Boyd:

Pursuant to the Commission's decision today, in the above referenced Docket, please find the Exhibits referenced in paragraph "10" of Lily Solar's currently pending Complaint, Cover Sheet and Certificate of Service.

Respectfully Submitted,

/S/\_\_\_\_\_  
Richard L. Whitt

RLW/cas



**APPENDIX 3 to LGIP  
INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this 25<sup>th</sup> day of March, 2015 by and between Lily Solar, LLC, a limited liability company organized and existing under the laws of the State of South Carolina, ("Interconnection Customer,") and South Carolina Electric & Gas Company a corporation existing under the laws of the State of , ("Transmission Provider "). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated February 16<sup>th</sup>, 2015; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility with the Transmission System;

**WHEREAS**, Transmission Provider has completed an Interconnection Feasibility Study (the "Feasibility Study") and provided the results of said study to Interconnection Customer (This recital to be omitted if Transmission Provider does not require the Interconnection Feasibility Study.); and

**WHEREAS**, Interconnection Customer has requested Transmission Provider to perform an Interconnection System Impact Study to assess the impact of interconnecting the Large Generating Facility to the Transmission System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's FERC-approved LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed an Interconnection System Impact Study consistent with Section 7.0 of this LGIP in accordance with the Tariff.

- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study and the technical information provided by Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Customer System Impact Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 The Interconnection System Impact Study report shall provide the following information:
- identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
  - identification of any thermal overload or voltage limit violations resulting from the interconnection;
  - identification of any instability or inadequately damped response to system disturbances resulting from the interconnection and
  - description and non-binding, good faith estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit, instability, and power flow issues.
- 6.0 Interconnection Customer shall provide a deposit of \$50,000 for the performance of the Interconnection System Impact Study. Transmission Provider's good faith estimate for the time of completion of the Interconnection System Impact Study is July 9<sup>th</sup>, 2015.

Upon receipt of the Interconnection System Impact Study, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection System Impact Study.

Any difference between the deposit and the actual cost of the study shall be paid by or refunded to Interconnection Customer, as appropriate.

- 7.0 Miscellaneous. The Interconnection System Impact Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, that are consistent with regional practices, Applicable Laws and Regulations and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

SCE&G

By: Pandelis Xanthopoulos

Title: VP Electric Transmission

Date: 3/23/15

Lily Solar, LLC

National Renewable Energy Corporation  
By: Jesse Montgomery  
Its President, Development

Title: Member

Date: 3/13/15

**Attachment A To Appendix 3  
Interconnection System Impact  
Study Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION SYSTEM IMPACT STUDY**

The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study, subject to any modifications in accordance with Section 4.4 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.  
Designation of alternative Point(s) of Interconnection and configuration.

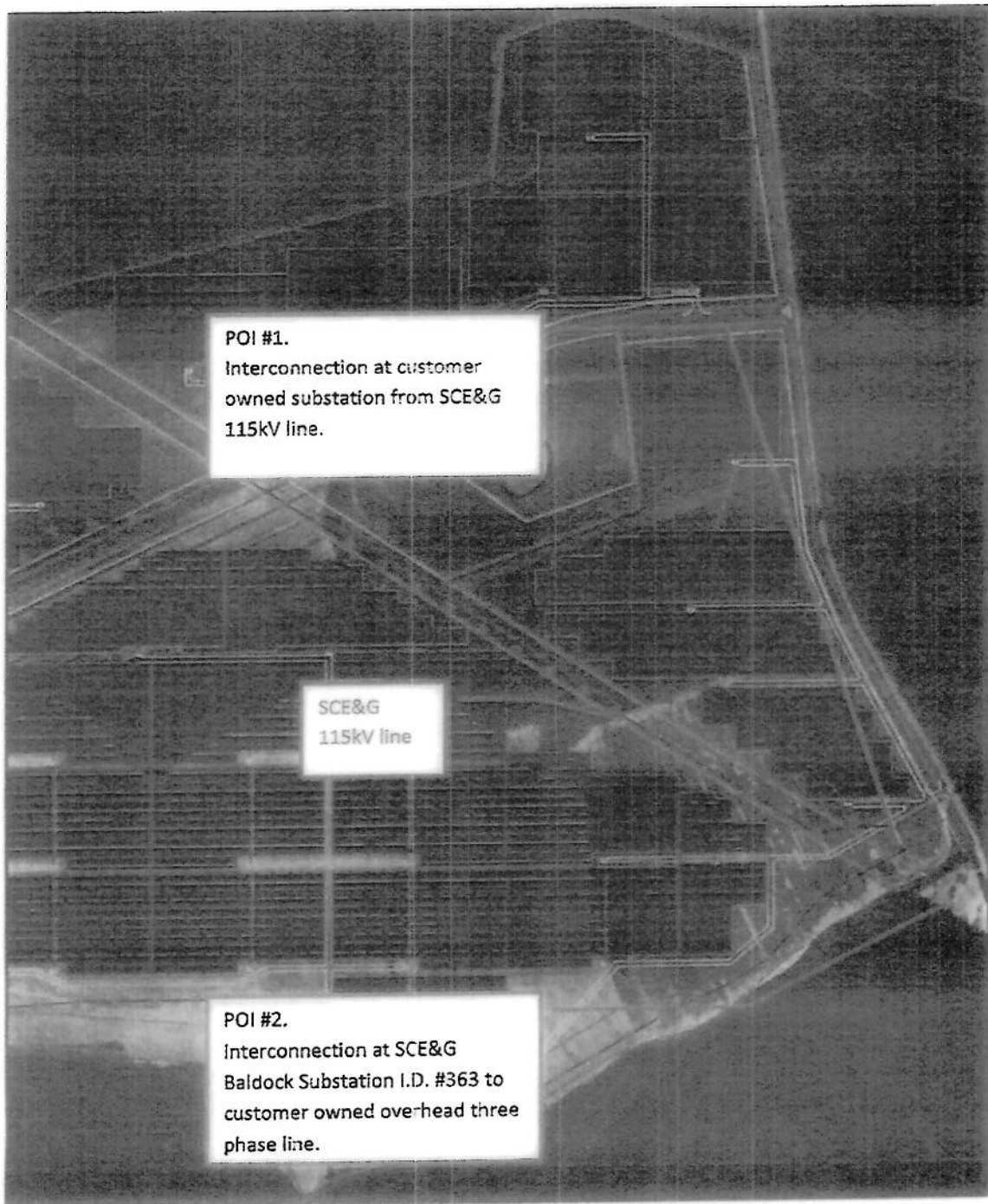
[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer and Transmission Provider]

Points of Interconnection to be studied:

1. POI at customer owned substation as depicted on Drawing 1-1
2. POI at SCE&G Baldock Substation I.D. #363 as depicted on Drawing 1-1

# Drawing 1-1

## Lily Solar, LLC



APPENDIX 4 to LGIP  
INTERCONNECTION FACILITIES STUDY AGREEMENT

THIS AGREEMENT is made and entered into this 22 day of July, 2015 by and between Lily Solar LLC, a limited liability company organized and existing under the laws of the State of South Carolina, ("Interconnection Customer,") and South Carolina Electric & Gas Company a corporation existing under the laws of the State of South Carolina, ("Transmission Provider "). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated February 16<sup>th</sup>, 2015; and

WHEREAS, Interconnection Customer desires to interconnect the Large Generating Facility with the Transmission System;

WHEREAS, Transmission Provider has completed an Interconnection System Impact Study (the "System Impact Study") and provided the results of said study to Interconnection Customer; and

WHEREAS, Interconnection Customer has requested Transmission Provider to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Transmission System.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's FERC-approved LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause an Interconnection Facilities Study consistent with Section 8.0 of this LGIP to be performed in accordance with the Tariff.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.
- 4.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of (consistent with Attachment A), schedule for required facilities to interconnect the Large Generating Facility to the Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- 5.0 Interconnection Customer shall provide a deposit of \$100,000 for the performance of the Interconnection Facilities Study. The time for completion of the Interconnection Facilities Study is specified in Attachment A.

Transmission Provider shall invoice Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay invoiced amounts within thirty (30) Calendar Days of receipt of invoice. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice.

- 6.0 Miscellaneous. The Interconnection Facility Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect



best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

South Carolina Electric & Gas Company

By: Pantelis Xanthakos By: \_\_\_\_\_

Title: VP- Electric Transmission Title: \_\_\_\_\_

Date: 7/23/2015 Date: \_\_\_\_\_

Lily Solar LLC

By: National Renewable Energy Corporation

By: Jesse Montgomery

Jesse Montgomery

Title: It's President, Development

Date: 7/22/2015

**Attachment A to Appendix 4  
Interconnection Facilities  
Study Agreement**

**INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR  
CONDUCTING THE INTERCONNECTION FACILITIES STUDY**

Transmission Provider shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the following number of days after of receipt of an executed copy of this Interconnection Facilities Study Agreement:

- ninety (90) Calendar Days with no more than a +/- 20 percent cost estimate contained in the report, or
- one hundred eighty (180) Calendar Days with no more than a +/- 10 percent cost estimate contained in the report.

Attachment B to Appendix 4  
Interconnection Facilities  
Study Agreement

DATA FORM TO BE PROVIDED BY INTERCONNECTION CUSTOMER  
WITH THE  
INTERCONNECTION FACILITIES STUDY AGREEMENT

Provide location plan and simplified one-line diagram of the plant and station facilities.  
For staged projects, please indicate future generation, transmission circuits, etc.

Location Plan and one line diagram remain the same as originally submitted  
in the interconnection application

One set of metering is required for each generation connection to the new ring bus or  
existing Transmission Provider station. Number of generation connections: 1

On the one line diagram indicate the generation capacity attached at each metering  
location. (Maximum load on CT/PT)

On the one line diagram indicate the location of auxiliary power. (Minimum load on  
CT/PT) Amps

Will an alternate source of auxiliary power be available during CT/PT maintenance?  
\_\_\_\_ Yes    ☒ No

Will a transfer bus on the generation side of the metering require that each meter set be  
designed for the total plant generation? \_\_\_\_ Yes    ☒ No (Please indicate on  
one line diagram).

What type of control system or PLC will be located at Interconnection Customer's Large  
Generating Facility?

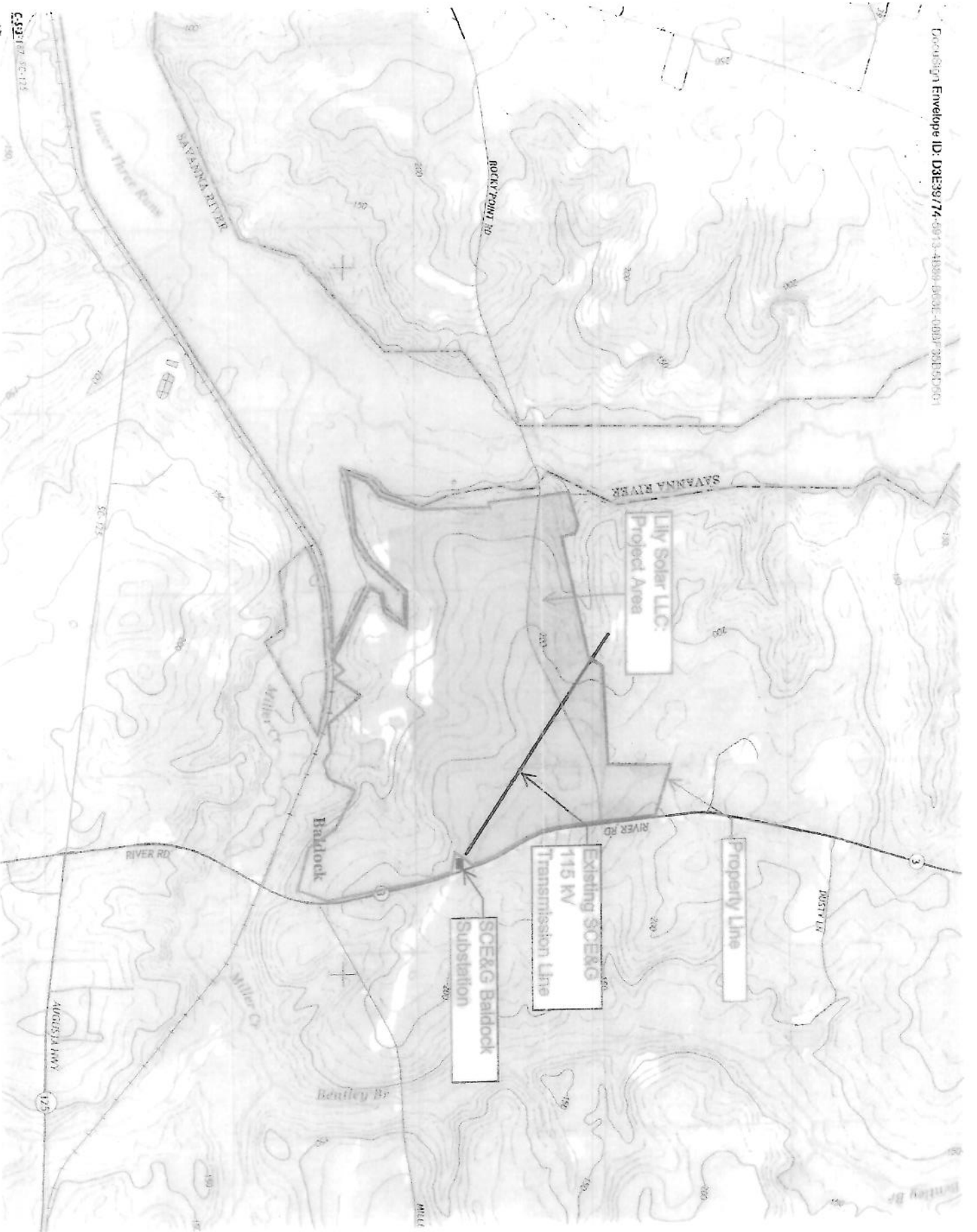
INR1C Solar Wave Inverter communication controller over Ethernet

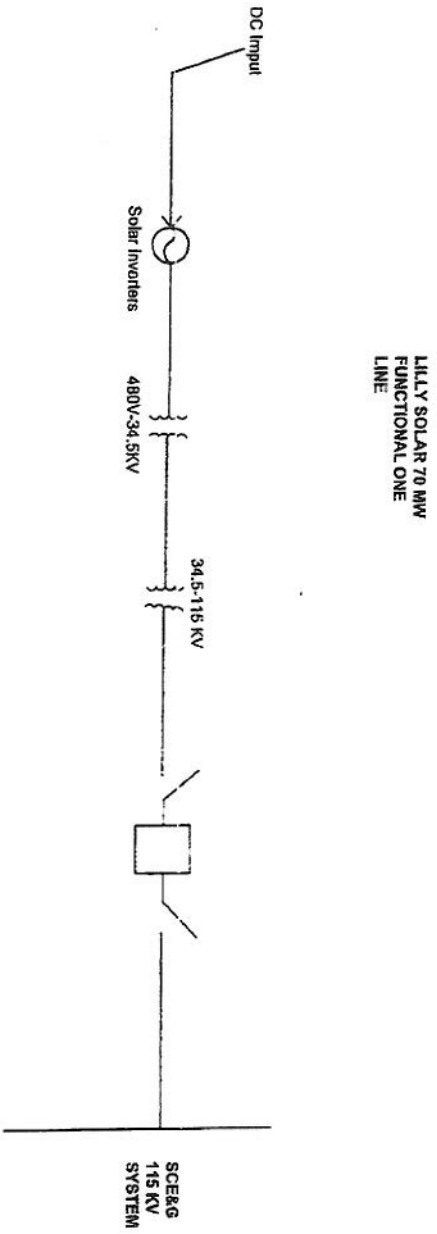
What protocol does the control system or PLC use?

INR1C proprietary communications

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission  
line, and property line. (Attached)

Date: 9/1/16





**General Notes**

No.	Revision/Issue	Date

Draw Name and Address

McGraw-Hill Construction  
601 Lewis & Clark Ave  
Cincinnati, Ohio

Project Name and Address

Noranco

Lilly Solar, LLC

One Line Drawing

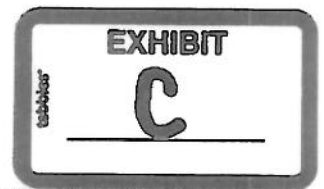
Project Sheet

Date 7/21 3 of 5

Scale

2/4/2016

Narenco Mail - RE: Generator Interconnection Procedures



Bret Sowers <bret.sowers@narenco.com>

## RE: Generator Interconnection Procedures

1 message

HAMMOND, MATTHEW J (MATT) <MHAMMOND@scana.com>  
To: Bret Sowers <bret.sowers@narenco.com>

Tue, Jan 27, 2015 at 7:22 AM

Bret,

SCE&G's Large Generator interconnection Procedure is Attachment M to the Open Access Transmission Tariff. From the OASIS site, select the folder on the left titled *Currently Effective OATT*. Our Tariff is listed there.

Take care,

Matt Hammond

South Carolina Electric & Gas

Manager, Electric Transmission Support

803-217-2175

### Confidentiality Notice

*This communication may contain non-public transmission information that is proprietary, and subject to disclosure limitations. This information should not be shared with, forwarded to, or read by any SCANA electric or gas marketing function employee. If you have received this message in error, please notify the sender immediately by reply to this e-mail, and copy Kevin Painter (kpainter@scana.com) and delete all copies of this message.*

EXHIBIT

D

## Lily Solar System Impact Study

1 message

Mon, Jun 22, 2015 at 3:31 PM

STONE, DJ <DJSTONE@scana.com>

To: Bret Sowers <bret.sowers@narencos.com>

Cc: Electric Transmission Support <ElectricTransmission@scana.com>, "HAMMOND, MATTHEW J (MATT)" <MHAMMOND@scana.com>

Bret,

Attached is the System Impact Study Report for Lily Solar. Per our Tariff, we are required to offer a System Impact Study meeting to discuss the report. Therefore, we would like to offer this meeting on July 7<sup>th</sup>, 2015 at 1pm EPT either at our office in Cayce, SC or via WebEx. Please let me know if this date/time work for you and your meeting preference.

Also, I have attached the Facilities Study Agreement for your review. We will provide an estimate of the cost and time after the meeting.

Sincerely,

*DJ Stone*

Electric Transmission Support

Office: 803-217-2146

Fax: 803-643-5191

djstone@scana.com

MC J36

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### 2 attachments

 Lily Solar - NARENCO System Impact Study Report.pdf  
329K

 Lily Solar Facilities Study Agreement.pdf  
38K



2/4/2016

Narenco Mail - Lily Solar Interconnection Agreement



Bret Sowers <bret.sowers@narenco.com>

## Lily Solar Interconnection Agreement

1 message

HAMMOND, MATTHEW J (MATT) <MHAMMOND@scana.com>

Thu, Jan 14, 2016 at 1:15 PM

To: Bret Sowers <bret.sowers@narenco.com>

Cc: "STONE, DJ" <DJSTONE@scana.com>, "BELLE, STEVEN SCOTT" <STEVEN.BELLE@scana.com>

Bret,

Attached, please find the Interconnection Agreement for Lily Solar, LLC. I've also attached the relevant drawing that will be incorporated into the agreement. You have 30 business days, or until February 29<sup>th</sup>, 2016, to return the executed agreements to me. Please don't fill in the date in the first paragraph. We'll complete that upon final execution. Additionally, please make sure to sign the milestones section of the agreement as well.

Please note that the agreement includes the acceleration optional upgrade of the Fairfax-Salem Switching Station.

Matt Hammond

South Carolina Electric & Gas

Manager, Electric Transmission Support

803-217-2175

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### 2 attachments

IA SCEG Lily Solar - 1-14-2016.pdf  
655K

Attachment 3-A Lily Solar LLC SLD.pdf  
893K

2/4/2016

Narenco Mail - RE: Lily Solar Interconnection Agreement



Bret Sowers <bret.sowers@narenco.com>

**RE: Lily Solar Interconnection Agreement**

1 message

**Electric Transmission Support** <ElectricTransmission@scana.com>

Fri, Jan 22, 2016 at 7:52 AM

To: Bret Sowers <bret.sowers@narenco.com>, Jon Burke <jon.burke@narenco.com>

Cc: "STONE, DJ" <DJSTONE@scana.com>, "BELLE, STEVEN SCOTT" <STEVEN.BELLE@scana.com>

Bret and Jon,

Thank you for your time Wednesday to discuss the interconnection agreement for Lily Solar. At this time, the agreement provided to you last week is the agreement that we plan to move forward with for projects of this nature.

Take care,

Matt Hammond

South Carolina Electric & Gas

Manager, Electric Transmission Support

803-217-2175

*Confidentiality Notice*

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**BEFORE  
THE PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA  
DOCKET NO. 2016-89-E**

IN RE: )  
Lily Solar LLC, )  
 )  
Complainant/Petitioner, )  
vs. )  
South Carolina Electric & Gas Company, )  
 )  
Defendant/Respondent. )  
\_\_\_\_\_ )

**CERTIFICATE OF SERVICE**

I, Carrie A. Schurg, an employee of Austin & Rogers, P.A., certify that I have served copies of Exhibits referenced in Lily Solar LLC's Complaint in Docket 2016-89-E, Cover Sheet, and this Certificate of Service, as indicated below, via electronic mail on June 8, 2016.

**K. Chad Burgess**  
Email: chad.burgess@scana.com

/S/ \_\_\_\_\_  
Carrie A. Schurg

June 8, 2016  
Columbia, South Carolina